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Disco

ALFALFA^{AND} SEED BOOK

*Dakota Improved Seed Co.
Mitchell, So. Dak.*

TENTH ANNUAL ANNOUNCEMENT

OUR company has now been established for ten years. We started out to conduct the Seed Business along different lines from many seed houses. We had our ideals in mind when we started out and have kept them in full view and put them in practice. Some of our ideals were the following:

We believe in selling **good seeds** always and at prices as low as consistent with highest quality.

We believe in shipping seed that is adapted to the locality and will give results. We have temporarily lost many sales because we have refused to ship varieties of seeds (corn in particular) into localities to which they would not be adapted.

We believe in a square deal and put that into practice. The result has been that our business has grown, not boomed, but has shown a steady growth.

For several years we have confined our efforts to **Field Seeds only**. Our location is particularly good for the production of **Hardy Alfalfa** seed and **early varieties** of corn and we have specialized in these. We handle only **Dakota** grown hardy alfalfa seed and in buying from us you are assured of getting the hardiest varieties known.

The various varieties of hardy alfalfa and early maturing corn you will find fully described in the following pages. We employ no salesman and depend upon this book and our satisfied customers to get orders for us. We solicit a continuance of trade from our old customers and a trial order from new ones.

We particularly solicit your letters of inquiry which will have our prompt and careful consideration. We maintain a **Service Department** and will be glad to render any aid we can at all times.

We consider our location ideal for the production of corn and alfalfa, being practically in the latitude of the northern Iowa and southern Minnesota line, and situated as we are in the alfalfa seed producing belt.

**Dakota
Improved
Seed
CO.**

Disco
TRADE MARK REG. U.S. PAT. OFF.

**Mitchell,
South
Dakota,
U. S. A.**

MAY WE TELL YOU THE EXACT COST TO YOU?

Date_____

Here's what I am in the market for. I may need more and I may take less, but at any rate what will be the cost of the seed and the transportation? Which will be the best way to send it?

[illegible]

Name.....

P. O.

State.....County.....

R. F. D. Street or Box No.

What Railroad?.....

Is there an Agent at your Station?.....

.....

If more than one R. R. or Express,.....

which do you prefer?



Dakota Improved



Seed Company



GUARANTEE



The Dakota Improved Seed Company Guarantees the Seeds It Sells to Be as Represented as to Quality and Germination. The Company will Replace Any Seeds or Refund the Money on Any Seeds Sold by It That Prove to Be Otherwise

It shall be the duty of the purchaser of goods sold by the Company in order to claim the benefits of its guarantee:—

1. To inspect shipment carefully on arrival and report anything that appears wrong.

2. To take samples of all important bulk seeds in shipment.

3. Upon receipt of seed to test portion of sample for germination or send sample to U. S. Seed Laboratory, or to your State Experiment Station.

4. If results of these tests are not as represented or are not satisfactory, to report this to the Company at once and adjustment will be made accordingly.

5. To make complaints, if any, as soon as the fact on which complaint is made can be determined. Complaints on

the germination of seed corn must be made within two weeks after shipment is received. Field results as to germination and purity may be referred to in making complaint but must not be depended upon as basis for settlement because field conditions are beyond the Company's control.

The Company will not insure a crop from seeds purchased as to description and productiveness because of the many factors which influence a crop and which are entirely beyond its control.

In no case will the liability of the Dakota Improved Seed Co. exceed the price paid for the seed purchased of the Company.

Freight Rates From Mitchell, S. D.

IN EFFECT JANUARY 1, 1917.

Given in Cents per 100 Pounds, Less than Car Lots.

Alfalfa, clover and grass seeds and cane seed take third class; grain, corn and feeds take fourth class as per Western classification.

	S. D.	3d	4th			3d	4th			3d	4th
Salem,		.16	.12	Bridge water,	"	.15	.11	Miles City,	"	1.04	.79
Sioux Falls,	"	.21	.16	Canton,	"	.21	.16	Musselshell,	"	1.34	1.11
Woonsocket,	"	.14	.11	Flandreau,	"	.27	.20	Lewiston,	"	1.42	1.18
Wolsey,	"	.19	.14	Howard,	"	.21	.16	Butte,	"	1.50	1.26
Redfield,	"	.22	.18	Bradley,	"	.34	.26	Billings,	"	1.34	1.11
Aberdeen,	"	.28	.21	Andover,	"	.32	.24	Le Mars,	Iowa	.30	.23
Bowdle,	"	.36	.27	Milbank,	"	.41	.30	Eagle Grove,	"	.53	.41
Mobridge,	"	.40	.30	Watertown,	"	.34	.26	Sanborn,	"	.35	.27
Orient,	"	.39	.29	Faulton,	"	.34	.26	Rock Valley,	"	.27	.21
McLaughlin,	"	.54	.46	Gettysburg,	"	.39	.29	Manilla,	"	.46	.34
Lemmon,	"	.65	.51	Hettinger,	N. D.	.72	.55	Charles City,	"	.43	.37
Plankinton,	"	.14	.10	Linton,	"	.53	.41	Cedar Rapids,	"	.57	.45
Chamberlain,	"	.21	.16	Edgeley,	"	.47	.36	Des Moines,	"	.53	.41
Kennebec,	"	.32	.26	Oakes,	"	.41	.30	Sioux City,	"	.30	.22
Murdo,	"	.49	.42	Fargo,	"	.68	.52	Chicago,	Ill.	.67	.47
Belvidere,	"	.57	.49	Grand Forks,	"	.83	.64	St. Louis,	Mo.	.68	.50
Rapid City,	"	.73	.64	Wahpeton,	"	.61	.47	Buffalo,	N. Y.	.99	.69
De Smet,	"	.24	.18	Jamestown,	"	.67	.52	Dallas,	Tex.	1.49	1.32
Huron,	"	.24	.18	Minot,	"	1.10	.85	Denver,	Colo.	1.04	.83
Miller,	"	.30	.23	Worthington, Minn.	"	.30	.23	Casper,	Wyo.	1.48	1.20
Pierre,	"	.39	.29	Winona,	"	.43	.37	Leavenworth,	Kan.	.64	.47
Philip,	"	.75	.66	Minneapolis,	"	.43	.37	Milwaukee,	Wis.	.67	.47
Underwood,	"	.87	.74	Duluth,	"	.66	.47	La Crosse,	"	.43	.37
Belle Fourche,	"	.96	.79	Marshall,	"	.43	.37	San Francisco,	Cal.	2.50	2.00
Buffalo Gap,	"	.94	.78	Crookston,	"	.82	.65	Seattle,	Wash.	2.20	1.83
Dallas,	"	.78	.63	Fergus Falls,	"	.74	.58	Ogden,	Utah	1.80	1.49
Tripp,	"	.16	.12	St. Cloud,	"	.55	.42	New York City,	"	1.20	.84
Armour,	"	.19	.14	Fremont,	Neb.	.49	.36	Baltimore,	Md.	1.17	.81
Tyndall,	"	.20	.15	Lincoln,	Neb.	.49	.36	Boston,	Mass.	1.25	.89
Platte,	"	.28	.21	Omaha,	"	.46	.35	Portland,	Ore.	2.20	1.83
Yankton,	S. D.	.22	.17	O'Neil,	"	.64	.51	Dayton,	Ohio	.95	.66
Elk Point,	"	.27	.20	Terry,	Mont.	.97	.74	Pittsburg,	Ohio	.99	.69



Hill's Riverview Ranch



The Home of Disco Registered Seeds.

This is where many of our Disco products materialize. Riverview Ranch comprises 1520 acres of tillable, fertile soil along the Jim river, especially well adapted for the growing of our seed corn and small grain. Mr. W. S. Hill, at the head of our Disco organization, owns Riverview Ranch and is also the owner of the famous Riverview herd of the dual purpose Red Polled Cattle, the largest in America, which has taken first place at the state fairs of Minnesota, South Dakota, Iowa and Nebraska against keen competition.

We have plenty of room to carry on our breeding plots, increase plots, and fields of corn and small grain; room to isolate our fields preventing cross breeding and alternating, for instance, a field of Riverview Special seed corn with one of Sixty-Day Oats or Silver King corn with Marquis Wheat or Oderbrucker barley.

A complete threshing outfit is maintained on Riverview Ranch; ample elevators in which to store the seed supply until ready for the cleaners in the Disco warehouse; and the finest outlet for the surplus crops right on the ranch thru the live stock Riverview maintains. This simply emphasizes our ability to hold up the Disco Standard by absolute control of our output from planting to harvest, and later distribution of the finished product thru this seed book. We aim to grade out, thru screens and gravity mills, only the choice heavy seed grains, retaining the rest, at no loss, as feed. This combination is wonderfully successful.

Our alfalfa nursery and increase plots are likewise in an ideal location. We are at work at the present time in increasing our output of the new Grimm, Disco 19A, likewise with Baltic, the variety Prof. W. A. Wheeler has developed to such a marked degree while in collegiate work as well as here at Mitchell. Our alfalfa work at the present time comprises over 200 acres of these excellent hardy, drought-resistant alfalfas. We are increasing the acreage and constantly trying out new varieties which show up as being worth while in the nursery plots.

See Price List on Inside Back Cover.

ALFALFA

Big Money In Alfalfa—There is no question but what the growing of alfalfa is one of the best, if not the best paying crop that can be grown on the farm, not only a money crop from the seed but as a hay and forage crop as well.

In order to get its full value it should be fed to live stock. Alfalfa, corn and live stock comprise the farm profit trio and there is absolutely no better feed to be raised on the farm. The expense of wintering live stock can be reduced by home grown alfalfa hay, the cheapest feed on the list. As a hog feed it cannot be excelled either in pasture or when fed as hay or alfalfa meal. The fact is, the value of alfalfa as a feed crop is not yet known and appreciated.

Can Be Grown In Your Locality. In a glance over reports regarding alfalfa acreage in the different states, the wide variation is both surprising and interesting. Perhaps this is due in some localities to the failure in getting a stand the very first time and resulting in a lack of further interest. If one were to give up so easily in raising a crop of corn what would the harvest be? If crop rotations are established in those locations, red clover or some other legume is being raised. Alfalfa will thrive and yield greater returns anywhere when compared with red clover.

It seems almost a waste of high priced paper and printers ink to still do missionary work for alfalfa, in this day and age, and yet we find there are not a few very much in doubt along this line. There is a great good to be derived from liming the seed bed—inoculation is to be advised under some conditions—a hardy variety of alfalfa adapted to the locality is essential. It is by no means hard work to establish a stand regardless of the location, if the seed is adapted to your conditions. Alfalfa is of too much value for you to become discouraged at the first failure. Should you fail, try again.

Hardy Seed Necessary. Winterkilling of alfalfa in experiments at St. Anthony Park, Minn., proved clearly the importance of hardy acclimated seed. The per cent lost varied from 3 per cent with a hardy type, to 56 per cent with a non-hardy variety. Another experiment carried on in North Dakota, in co-operation with one of the largest alfalfa growers in that state, resulted in a 90 per cent stand with hardy and as low as 5 per cent stand from a Texas variety. At Highmore, S. D., in a test of genuine hardy and a commercial strain of so-called hardy carried on by Prof. W. A. Wheeler, the percentage of winter loss for the hardy was 11 per cent as against 86 per cent with the so-called hardy.

Scores of other cases might be given here, actual tests carefully carried out at experiment stations and by individual, practical farmers. On page eleven we cite one extremely interesting example and one clearly emphasizing the importance of hardy alfalfa even in central Iowa.

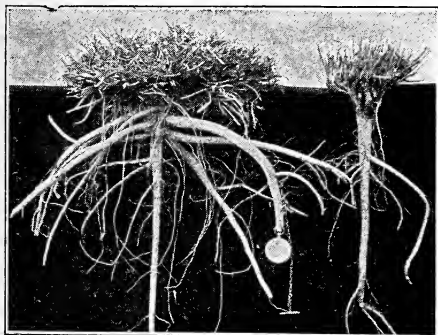
See Price List on Inside Back Cover.



Hardy Alfalfas

There are certain strains or varieties of alfalfa which possess hardiness to a very marked degree and such should be chosen in preference to the more tender ones. Some strains will winter-kill in severe winters in the latitude of Kansas and Missouri, while there are other strains that survive the most severe winters of North Dakota and Canada.

On page 8 we describe more fully the Grimm and Baltic strains. These are



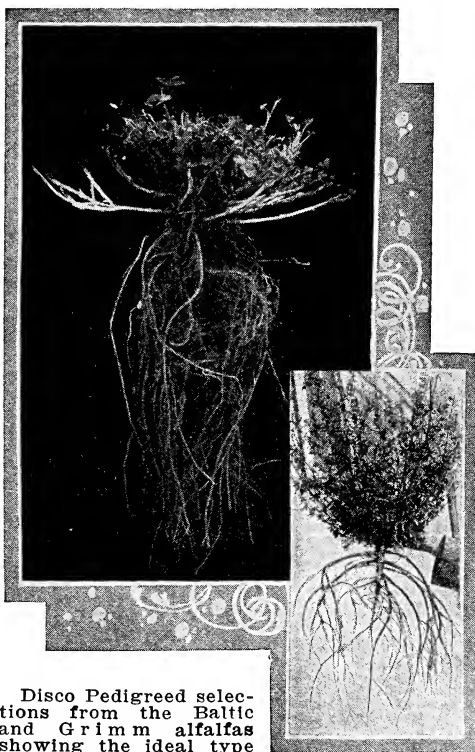
Representative plants of the Hardy and Non-hardy type of crowns of four-year-old alfalfa taken from the same nursery, grown as single plants under the same conditions. The plant on the right, the common or Southern type; the plant on the left, a fair sample of Baltic alfalfa, a variety found growing near the little town of Baltic, South Dakota. (Bul. 181, Col. Ag. Exp. Sta.)

known the world over as being hardy in every way. They have the immense spread of crown, underground root stocks of a branching habit, and underground buds protected by the soil and crown in such a way as to withstand severe winter weather without a snow covering, coming up between the crowns to thicken the stand. It is by the aid of these underground buds that fields of long standing are in existence.

The non-hardy strains of alfalfa have more erect crowns, and while stooling in habit, the buds are so near the surface as to be exposed to the winter freezing without a snow covering. Then again, the alternate freezing and thawing of early spring works havoc with the plants. A dry July or August will in turn dry out the buds until they go into winter quarters in a weakened condition. The non-hardy varieties have what is known as a tap root with but very few side roots to hold the plant in place. Soil heaving, so common in the eastern and south-central states, quite often breaks the tap root,

killing the plant, or at least setting it back in growth and yield.

Hardiness is also referred to in the ability of the Grimm or Baltic strains to adapt themselves to various unusual conditions. Should there be hard pan to contend with, the many branching roots adapt themselves to these conditions and grow along parallel with the hard strata in the subsoil. The non-hardy plants with a long tap root find difficulty in doing so and soon become root-bound. Should the water level be high, the tap rooted varieties will grow down into the too sour subsoil, the bacteria forming nodules will not be formed and the plants will gradually die from "wet feet." With the Grimm or Baltic the danger is not as great altho the stand will be more successful where the moisture conditions are corrected.



Disco Pedigreed selections from the Baltic and Grimm alfalfas showing the ideal type to resist injury from freezing or heaving of the ground. Note the low spreading much-branched crown below the ground line and the much-branched root system.

See Price List on Inside Back Cover.

Greater Profits From Registered Alfalfa

It is just as important to know the kind of alfalfa you plant as it is to know the kind or variety of any other seed stock used on the farm. In fact it is more important because a single seeding of alfalfa lasts for several years (if you plant Disco Registered Alfalfa Seed,) while grains are merely one year crops. Instead of buying just alfalfa seed, the next time any seeding is done on your land, try a portion at least of some of

Disco registered, hardy stocks of alfalfa and by so doing, know to a certainty just what you are buying. Heretofore we have had many requests for "the same kind we obtained before." Until the registration system was established we were unable to supply this demand. By the use of our registration system our customers are able to secure the same kind of seed in future years should they wish to do so.

What Are Registered Disco Alfalfas?

The "Disco Registration System" enables us to trace to specific strains of definite single origin and is used in registering the most desirable native or acclimated stocks. Disco register numbers will be applied only to those stocks having a record of growth of ten years or more in the Dakotas or under equally severe conditions. Many of these registered stocks have records of over 25 years in the Dakotas. For convenience we have set an arbitrary minimum of ten

years of acclimatization for all Disco registered strains of seed.

A seeding of Disco Registered Alfalfa Seed will produce the desired results with a less amount of seed. A seeding of ten to twelve pounds per acre of registered seed invariably will give a greater return than fifteen to twenty pounds of ordinary seed. The cost per pound may be more, but the lighter seeding required and the greater returns from the registered seed more than make up the difference.

Established Registered Alfalfas

We are describing a few of our registered alfalfas, of which we have fairly good stocks and all of which have made splendid records.

Disco 26. One of a group of three or four registered numbers which are heading the list of fifty or more native stocks being tested in several State and Federal Experiment Stations. Grown in southern Perkins County, S. D. A very promising type.

Disco 28. Has been grown in southern Meade and Pennington counties, South Dakota, for about thirty years. Some of the old fields are still in existence. It is a strong grower, develops a very strong crown and is a remarkable producer.

Disco 38. Has been grown in western Meade and southeastern Butte counties for over twenty-five years. We have distributed much of this seed and especially favorable reports have come from Oregon and other extremely western states where it is being used in the drier regions without irrigation.

Disco 79. A native alfalfa of about twenty years' known record in the Black Hills region. Comes from same locality as Disco 28 and is doing equally well all over the country. Is a great producer of both hay and seed.

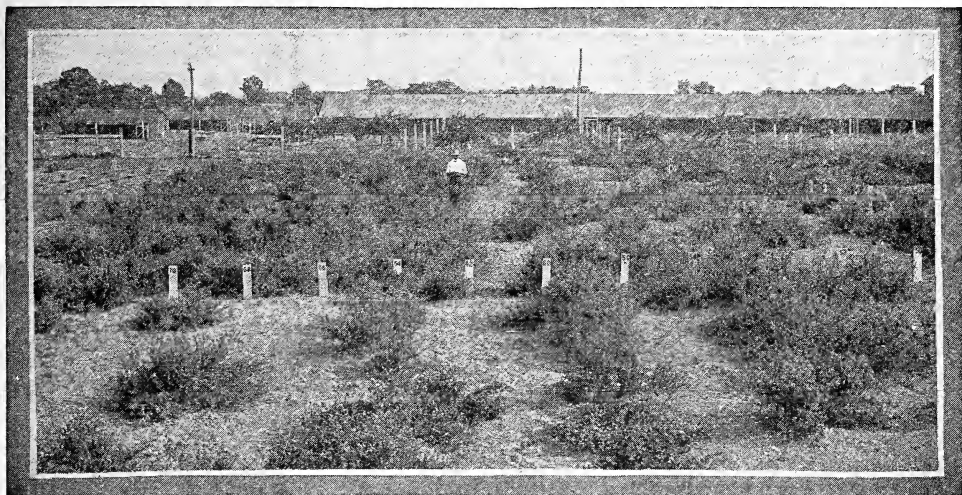
Disco 80. This stock is native of Lyman and Jones counties, S. D., and especially that portion tributary to the White River. The fields appear to be both drought and cold resistant to a marked degree.



Registered

Disco
GUARANTEED SEED

Alfalfa



Portion of Alfalfa Nursery at the Michigan Agricultural Experiment Station. The rows on the left of man standing in center are a number of Disco Alfalfas furnished to the station for trial in 1910. A strong contrast is here shown between the extremely hardy Disco Alfalfas and the tender common strains.

Disco

Disco Pedigreed Alfalfas

Disco

The work of developing pedigreed strains of hardy alfalfas was begun by W. A. Wheeler at the Brookings and Highmore Stations in 1904. As a result of this work there have been produced a number of strains of alfalfa that show a decided superiority over the common alfalfas as well as over the parent stocks from which the pedigreed strains were selected and developed.

The pedigreed strains growing in the **Disco Alfalfa Nursery** today represent selections from the first to the seventh generation. Practically all of them trace back to the parent stocks of Disco-Grimm, Disco-Baltic and Disco-Turkestan, with which Mr. Wheeler started plant breeding work in 1904, all of which have developed remarkable records of hardiness and production.

We believe that our work in the development of pedigreed strains of alfalfa is the most important work that we have done and ranks as the leading work of the kind in the country today. In fact, we know of no other commercial organization in the world conducting the kind of investigational work with alfalfa that we have done and are continuing to do.

Until the Disco pedigreed strains have been increased to much greater quantities than at the present time they will have to be offered at comparatively high prices. The general stocks of Disco-Baltic, Disco-Grimm and Disco-Turkestan, though not in a strict sense pedigreed alfalfas, are usually grouped with the pedigreed strains because of their remarkable records of hardiness and production. In the numbering of Disco registered pedigreed strains a letter is often used following the number to designate the parent stock from which the selection has been developed. Among the registered pedigreed selection numbers from these three parent stocks that show up most prominently at the present time are the following:

From the Baltic—Disco numbers 11C, 13C and 32C.

From the Grimm—Disco Numbers 5A, 6A, 10A and 19A.

From the Turkestan—Disco Numbers 14B, 15B, 16B and 62B.

We have some very limited stocks of these pedigreed selections from Grimm and Baltic. We will quote price on application.

See Price List on Inside Back Cover.

Grimm Alfalfa

History and research have left little room to doubt that Wendelin Grimm was the introducer as well as the unconscious breeder of this valuable alfalfa that bears his name. He was living in a little German settlement located in a splendid agricultural section of southwest Germany, the Grand Duchy of Baden, until he was about forty years of age. In the spring of 1857, having heard of the wonderful opportunities offered in America thru friends who had already made their homes in Minnesota, he left his fertile Baden resolved to join his countrymen. We are told that Grimm reached Chaska, Carver Co., Minn., about Sept. 1st and among the various belongings he brought with him was the original lot of alfalfa seed which did not weigh more than 15 or 20 pounds. The following spring, 1858, this seed was sown.

In his first attempts he suffered many setbacks and for many years this Grimm alfalfa made but little headway. But Grimm was persistent, for he knew the value of this plant in his fertile Baden and was determined to save every plant that could be saved. It seemed to gain strength, to become acclimated, perhaps produced a new variety, until it is now the most dependable of alfalfas capable of enduring severe changes of temperatures and the attendant hardships.

It was nip and tuck for several years, but by 1867 Grimm was able to produce 480 pounds of seed on 3 acres of land. From this time on the "everlasting clover" brought to the Northwest by Wendelin Grimm made gradual progress.

About six years before Grimm left Germany with what was destined to be the parent stock of the invaluable Grimm alfalfa, the common type of alfalfa was introduced into California and in time worked its way into Minnesota and the Northwest, only to kill out three years out of five and to show up the true worth of this hardy Grimm type.

At the present time, trials without number at Minnesota, North Dakota, South Dakota, Montana, New York and Canadian Experiment Stations have determined the real worth of the Grimm type conclusively to be many fold. It is fully able to endure the trying weather of fall, winter and spring, is exceedingly cold resistant; in a measure drought resistant; can be cut with safety later in the fall and will bear more abuse in pasturing than any other kind.

The real value of this Grimm type was not generally recognized until the attention of the Minnesota Experiment Station was called to it about the year 1900. To the professors in charge of this work, great credit is due in that they recognized its hardiness and great value to the Northwest.

We would have you become acquainted with Farmers' Bulletin No. 757 entitled, "Commercial Varieties of Alfalfa." From it we quote:

"On account of its superior hardiness, Grimm alfalfa is particularly recommended for the northern part of the Great Plains region and all parts of the Northwest. It has also proved better able to survive the winters in the colder portions of the humid section of the country where winter killing is a serious factor. The supply of seed on the market is still rather limited and commands a high price. As a result unscrupulous dealers have offered for sale large quantities of common alfalfa under the name of Grimm."

Keep this in mind when purchasing your supply of Grimm seed. Being specialists in this line, the original supply is a certainty with us. Better be safe than sorry.

DISCO 19A

From the many hundred individual trials carried on in our alfalfa nursery there are selective plants which stand out distinctly as being heavy seeders, erect and strong in habit of growth and producing many leafy branches. By careful selection and planting in increase plots, we are developing such worth while pedigreed stocks as Disco 19A, an alfalfa strain with a known parentage.

This pedigreed selection from the famous Grimm alfalfa has probably been tested at more experiment stations in a greater number of states and over a wider area than any other strictly pedigreed alfalfa tracing back to any individual plant selection.

From a large percentage of these trials we have had full reports on Disco 19A and other alfalfas with which it has been tested. So far as reports have been received, Disco 19A has never been surpassed for hardiness or production of either hay or seed. We have a limited stock of this excellent pedigreed strain that we will supply as long as it lasts.

Disco Baltic Alfalfa

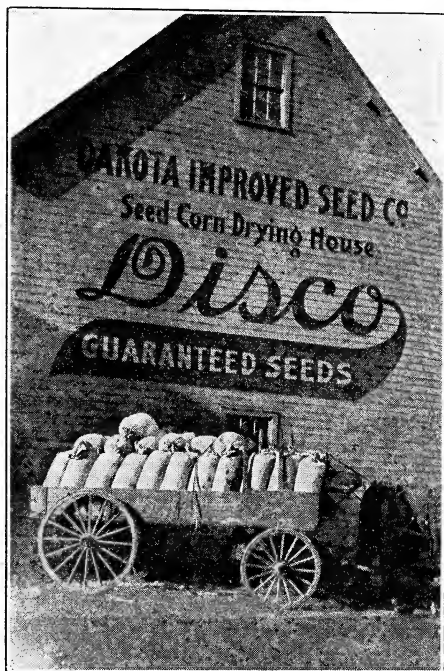
Disco
GUARANTEED SEEDS

A valuable and comparatively new variety of hardy alfalfa very similar to Grimm and rapidly being established in the esteem of the various stations in the U. S. and Canada. It may be that the Baltic and Grimm alfalfas are from the same original stock. The pedigree of the Baltic is not authentic but when first recognized as a promising variation from the Grimm and yet bearing all the characteristics of that variety, it was being grown in eastern South Dakota.

Credit is due W. A. Wheeler for his ability to foresee the desirability and hardiness of Baltic alfalfa and for his work with this variety at Brookings, S. D., and at Highmore, S. D., and subsequent trials at Newell, S. D., and here at Mitchell, S. D.

In describing the Baltic alfalfa, the authors of Bulletin No. 757 have this to say: "While the Baltic differs slightly from the Grimm in some minor details, the two are so similar that it is seldom possible to distinguish one from the other. This variety is recommended for sections where the ordinary strains suffer considerable loss thru winter-killing. This includes practically the same territory to which the Grimm is adapted, that is, the New England states; the greater part of New York, Michigan, Wisconsin, and Minnesota; the northern Great Plains states; and the northern part of Pennsylvania, New Jersey, Ohio, Indiana, Illinois and Iowa. As in the case of Grimm alfalfa the quantity of Baltic seed produced in the U. S. is rather limited and the same precautions are necessary in purchasing it."

In reports from numerous Experiment Stations, where the Baltic has been tried out along with Grimm and other varieties, it has proved to be a better yielder of hay and a better seed producer in the seed producing sections of the country. This makes Baltic a more valuable alfalfa for both hay and seed.



The above represents a recent shipment of over 5,000 lbs. of Disco Grimm and Disco Baltic alfalfa seed being made to the Department of Agriculture at Washington, D. C. Proof that the Government officials consider our Disco Grimm and Disco Baltic genuine.

See Price List on Inside Back Cover.



Commercial Alfalfa Seed

Dakota grown alfalfa seed has become recognized by the leading seedsmen as a distinct type. It is also a very popular variety with the experiment stations throughout the country. This fact is due to several things. The seed is usually to be had in the Dakotas if there is any to be found the country over; conditions in this state are usually ideal for seed production, with rigorous variations as to heat and cold making for a very hardy type. Ranchers in this state and especially those west of the Missouri River have combined the culture of alfalfa with live stock, many of them maintaining vast fields for hay and seed, and many of these fields long established.

Dakota alfalfa seed has made an enviable reputation in the northern states because of its general hardiness. Seed from this state brings much higher prices because of the added value coming from greater hardiness.

We especially recommend Dakota alfalfa for northern planting and are specialists in this line. The seed not only comes from fields long established, but from altitudes varying from two to three thousand feet and from semi-arid regions. The plants are compelled to undergo a natural selection and the seed has inherited the tendency to become vigorous to a very marked degree. There is absolutely no questioning the past performances and present worth of Dakota alfalfa.

Purity—Germination Insurance

All stocks of Disco Registered Alfalfa seed are sampled to State and U. S. seed

laboratories before shipment. The results of these tests are used as the basis of the report on the Purity-Germination Tag which is attached to every shipment of Disco Registered Alfalfa seed.

KIND OF SEED		DISCO 28 ALFALFA			
Stock Mark	%	Germination Mo.	Year	% Purity	Grown in
160	90	4	1914	99.8	SOUTH DAKOTA
	80	INCLUDING ONE-HALF HARD SEED ACTUAL 5 DAY LABORATORY TEST			
IMPURITIES NO NOXIOUS WEED SEED PRESENT					
Dakota Improved Seed Co. MITCHELL, SO. DAK.					

These tags cover the requirements of the seed laws of all the states. Every purchaser is thus assured of an accurate statement of the quality of his seed.

Our Grades of Commercial Alfalfa Seed

Care is used in the purchase of our commercial stocks of alfalfa. In cleaning and milling process two grades are established—our **Disco Brand** and the **Emerald Brand**. We might quote on one grade only by blending the two grades but prefer to keep the highest possible grade as our Disco which must meet the requirements of any State or National test, be clean plump seed of good color according to the season and of high germination.

The Emerald Brand is a very good grade and usually an excellent business proposition, in fact is equal to the best grade often sold. The difference between the real value of this and the Disco Brand is often only one of appearance instead of a real difference in quality.

This Unbiased Article from Wallace's Farmer Tells the Plain Facts About Alfalfa

Winter Killing of Alfalfa

"Two years ago this spring, the Iowa station, at Ames, planted several hundred different varieties of alfalfa, in small plots, side by side. Practically all of the different varieties came through the first winter in excellent condition, but last winter, with its coat of ice, gave them a real test. Just before the winter came on, one-half of all the plots had been clipped close to the ground with a lawn mower, so as to make the trial more rigorous. This spring it was found that some of the varieties had completely winter killed; the Arizona, New Mexico, Texas and Spanish varieties were the hardest hit. Some of the Kansas sorts were badly damaged, while others came through in fair condition, and one or two did splendidly. It seems that under ordinary conditions, over the southern half of Iowa, Kansas alfalfa seed should do fairly well. But the Nebraska alfalfa proved to be distinctly hardier than the Kansas, and the Dakota alfalfas, in turn, proved to be hardier than the Nebraska alfalfas. However, the worst of the Dakota alfalfas was not quite so good as the best of the Kansas. The Utah alfalfas, on the whole, seem to be inferior to the Kansas alfalfas, and the Montana sorts did not come through as well as those from Dakota. One seed firm in the Dakotas, which makes a special business of breeding alfalfa, came through with colors flying, several of its varieties showing not a particle of winter killing, even where the plants had been clipped close late last fall.

There is great variation in the varieties of alfalfa, and it is time that the seed growers of Kansas, Nebraska and the Dakotas were establishing definite pedigreed strains."

The above and many other observations prove conclusively that winter-killing is not confined to the extreme northern states and that Disco Registered Hardy Alfalfas are superior to others of southern origin or unknown record in the states of the Corn Belt as well as in the extreme northern states.

At the Missouri Experiment Station a few years ago Nebraska-grown alfalfa entirely winter-killed while hardy Disco Registered strains in the same plot and under identical conditions stood the winter perfectly.

THE unbiased article, at left, from Wallace's Farmer of May 19th, 1916, gives an account of alfalfa tests at the Iowa Experiment Station and is simply one of similar reports from experiment stations all over the country.

FROM this it is evident that the very best alfalfas would be registered Dakota strains of known record. The only recognized registered strains offered today are the Disco Registered Alfalfas.

THE seed firm referred to is the Dakota Improved Seed Co., of Mitchell, S. D., which is the only commercial institution in the United States today making a "special business of breeding alfalfa" and offering seed of registered and pedigreed strains for sale.

THE Dakota Improved Seed Co. was the first to recognize this and put it into practice by offering strains of known hardiness and record as Disco Registered Alfalfa.



How To Grow Alfalfa

1. Select a drained, well prepared and well settled seed bed, the richer the better.
2. Be sure the seed is hardy. It is the safest and the cheapest in the end. Don't use seed from unknown or questionable sources.
3. Be careful not to cover the seed too deep. From $\frac{1}{2}$ to 1 inch is sufficient. In drilling in be careful; in sowing broadcast, harrow lightly.
4. Seeding can be made anytime from April to September in amounts varying from 8 to 20 pounds.
5. Much good may be derived from adding lime to the soil and inoculating the seed. In many localities both are necessary. In this state it is not practiced to any extent. So do not become confused in thinking the culture of alfalfa requires a College education.
6. Best to treat an alfalfa field with care when it comes to pasturing the first year. Wait until the seed bed is well firmed and the root system well established.
7. Don't give up. Many well known growers have succeeded only by staying with it.

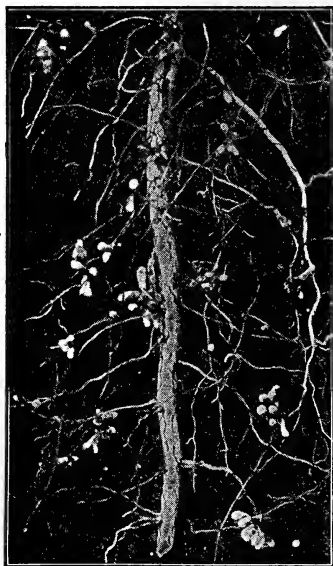
Inoculation of Alfalfa

All authorities on the subject advise inoculation of the seed or of the soil by various methods. It is rather costly to inoculate the soil, considering the labor in transporting the soil from a neighbor's field and spreading it over the soft seed bed. It is so much easier to treat the seed rather than the seed bed, either by the glue method, or better with a pure culture at a cost of from 10 to 20 cents depending upon the amount of seed sown.

Inoculation places the nitrogen-fixing bacteria where they are needed and absolutely necessary for a perfect stand. In the older alfalfa growing districts that are fitted naturally for the growing of alfalfa, the soil already containing lime and bacteria, further expense in this regard is useless. This condition prevails in much of western South Dakota, and in fact a large part of this state and in many other western states. In most of North Dakota, Minnesota, Iowa, Missouri and states east of these, very marked results are often secured from inoculation by pure cultures.

We carry in stock only pure cultures for alfalfa put up for us in the most approved form by a prominent bacteriologist and can be relied upon to accomplish the desired result.

Prices: Culture for 1 bu. or 60 lbs. \$1.00. Five cultures or enough for 300 lbs. \$4.00.



Portion of root of alfalfa plant showing the tubercles or nodules formed by the nitrogen-gathering legume bacteria. (Photograph natural size.)



Sweet Clover

WHITE BLOSSOM (*Melilotus Alba*) is a biennial, that is, lives but two years unless the seed crop at the end of the second year is allowed to form and scatter. For this reason Sweet Clover is well adapted to fit into crop rotation. Many prefer the white blossom variety because it is a very rank grower, and excellent for pasture. There are those of our customers, however, who will sow only **YELLOW BLOSSOM** (*Melilotus Officinalis*) claiming for it earlier yields, fine quality of hay and the seed is usually lower in price.

WHERE TO PLANT. If there is any doubt as to the advisability of sowing alfalfa or red clover, one will be safe in trying sweet clover first. It will grow in a variety of soils, wet or dry, heavy or light and is especially useful in improving alkali soil, makes a splendid growth along ditches or creek banks to prevent too rapid erosion. In fact this crop will help to fill up a wash, and do the work properly.

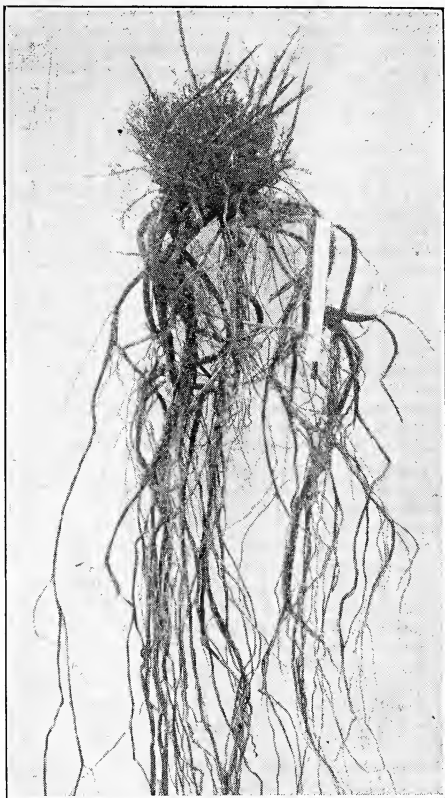
It is in building up worn out land that sweet clover is of especial worth. There are thin places on many farms that can be made fertile and at the same time produce pasture or a hay crop, and at a small outlay per acre, by the use of sweet clover.

The sweet clover plant grows rapidly. The root system at the end of the second season is very extensive and will furnish an abundance of plant food for an alfalfa crop or a crop of corn to follow. The nitrogen gathering bacteria found on the alfalfa roots are also present on the sweet clover roots, and while a stand of sweet clover may be obtained very easily, as a rule, it is advisable at times to inoculate the seed to make sure.

For an all-around money crop, hay crop, pasture crop or soil builder, sweet clover is a wonder. Its adaptability and usefulness is wide spread.

CULTURE. We advise the use of from 12 to 15 pounds of hulled seed to the acre or 20 pounds of unhulled. Use a nurse crop, or not, in a well prepared firm seed bed. Cover very shallow. We have customers who prefer to sow the unhulled seed during the winter months in the snow or on the last skiff of snow in early spring, depending upon the alternate freezing and thawing to rupture the seed coat insuring proper germination when warm weather arrives. This is the way the plant in the wild state is reproduced.

Usually the first year one cutting of



Note Extensive Root System.

hay or excellent pasture will be obtained by late summer. Sweet Clover pasture is of much value; horses, sheep, cattle and hogs relish it and obtain their first green feed from it in the early spring. Being very drought resistant, the pasture supply is not entirely checked during mid-summer drought. There is no danger from bloating.

SCARIFIED SEED. Probably there are more hard seeds found in sweet clover than in other clovers or alfalfa. This percentage can be greatly reduced and the actual percentage of germination by test brought up a great deal by scarifying the seed. This is done by a special machine for this purpose and we can furnish scarified Sweet Clover seed to those of our customers who desire it at one cent (1c) per pound extra. For spring seeding, scarified seed is much safer to use than unscarified.



Disco Seed Corn

We are specialists in growing seed corn. We realize the importance of supplying corn suitable to the locality in which it is to be planted. For ten years we have been producing early corn for the country lying to the north of us. Our location is ideal for this work. You will be safe in planting **Disco Seed Corn**.

Disco Seed Corn for the North is **North-bred** and **Dakota Grown**. Seed is brought from special Northern stations each year and this seed is used for growing the general crop of seed for sale. Extreme earliness, full maturity, high germination and maximum productive power are thus secured in **Disco Seed Corn** in the best possible combination at the most reasonable price.

Our early varieties such as **Disco Pride**, **Northwestern Dent**, **Minnesota 13**, and **Flint** varieties as well as the later varieties such as **Silver King**, **Disco 90-Day White**, **Riverview Special**, **Early Murdock** and **Wimple's Yellow Dent**, you will find described on the following pages.

THE SEED CORN SITUATION

The situation last spring was very critical, it was in fact very nearly a seed corn famine. The **Dakota Improved Seed Co.** was very fortunate in having carried over a quantity of old seed corn which was in demand wherever hardy seed was required. We were beset on all sides with inquiries and orders.

THE 1916 CROP

This year the crop conditions are, in a way, very different. The spring was very late, many were compelled to replant, a fact they now regret. The entire summer was quite unfavorable but the fall was ideal and what corn survived the

extremely hot weather of mid-summer is seed of high germination.

It is apparent, from personal observations over the corn-belt, from the agricultural press and from the number of inquiries we have received to date, that seed corn will again be a very popular topic.

YOUR MONEY'S WORTH

Our supply is in splendid shape, of high test and practically all grown in the vicinity of Mitchell. Our early varieties are all grown in the vicinity of Mitchell and are grown from seed that is bred and selected under the northern conditions for which we are growing our corn. We aim to meet the type requirements of any locality in listing the twelve or fourteen varieties we have gathered together. Our seed is testing strong but we urge you to use your own judgment in this regard. Test the corn yourself. We have confidence in the seed and will be glad to ship it subject to your approval. As with any other reliable seedsmen, we are building up our trade only thru the confidence you place in us. We are here to stay, understand the seed corn business, and will gladly help you out with advice if in doubt as to a suitable variety for your locality. If that variety has become exhausted, we will frankly tell you so.

ORDER EARLY. Many are the orders we receive at planting time for seed corn to go by express. Why not use forethought and send along the order early. It will help us to fill the order, our stocks will be complete and you will save money on the transportation as well as much more time in which to test the corn for germination.



Registered



Seed Corn



Review Special



A variety long established on Hill's Riverview Ranch. Has been developed not for the largest type of corn but for the hardy characteristics which predominate.

The ears will average $8\frac{1}{2}$ inches in length, a girth of 7 inches and with sixteen to eighteen rows well carried out at butt and tip. The dent is on the dimple order, pronounced and yet not too rough. The color is a rich yellow, grain moderately deep and of a smooth handsome appearance. The shelling percentage is around 88%.

In establishing the type, Mr. Hill has had a definite aim in view. The ears are well formed, uniform and with a moderately strong shank. The field characteristics are in its favor with leafy growth of $7\frac{1}{2}$ to 8 feet, and with numerous brace roots.

Riverview Special thoroughly matures in 90 days when planted on favorable soil and in a good location, but 95 days will perhaps be a safe average. This makes an all around dependable variety of corn where early frosts are common. The southern half of South Dakota, Minnesota, Wisconsin and Michigan and the north half of Iowa and Illinois covers fairly well the territory best suited for Riverview Special. It may also be used advantageously drilled in early June for ensilage or fodder. Three large silos are filled on Riverview Ranch each fall with Riverview Special. It fills the bill and suits us as well as our customers from whom we have numerous testimonials on file. Our supply is large and of high test.

CORN CULTURE IN THE NORTHWEST.

A Valuable Book Free to Every Corn Grower.

By W. A. WHEELER.

We have published this book, believing that corn growers would be interested in learning more about our several years of experimenting and careful selection of varieties of corn that are best adapted to the varying conditions that exist in different localities. What we have to say is right to the point. Send for your FREE copy today. Supply limited.

Price List for Corn Page 23.



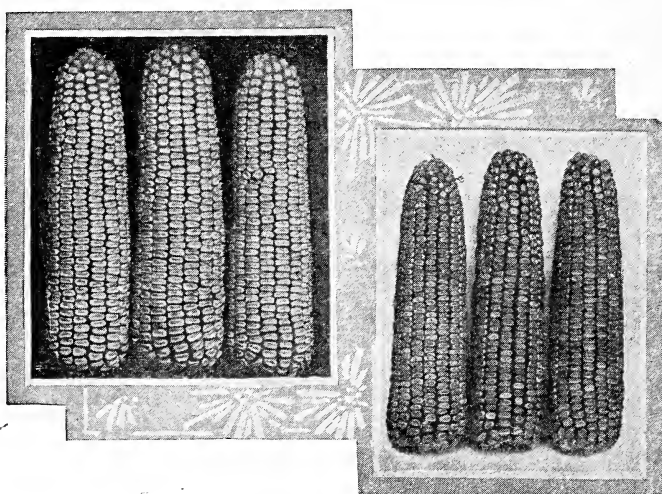
Disco Pride Corn



An Improved Strain of Brown County Yellow Dent

In 1906 we first ran across a variety of corn in Brown County which had made a good record for yield and earliness. It has been grown there and has matured satisfactorily every year for the past eighteen or twenty years. It has been tested at the Highmore Experiment Station, where it yielded between forty-five and fifty bushels per acre. In 1907, at

a good yield of corn under adverse circumstances. We believe that the Disco Pride corn planted in the northern part of South Dakota, North Dakota or Montana is as safe a proposition as anything in the way of corn that can be secured. Corn-growing in Montana is just in its infancy. We have been furnishing this variety of corn to our Montana customers



Disco Pride Corn.

the same experiment station, this corn outyielded all other varieties and showed a drouth resistance second to none. In fact, there was no corn at the Highmore station in 1907 that was nearly equal to this in resisting dry weather. In type it resembles the Pride of the North and North Dakota Golden Dent.

The original stock of Brown County Yellow Dent as we secured it in 1906 had not been selected for uniformity of type or color. The improved strain which we offer as Disco Pride shows a great improvement over the original. It retains the extreme earliness of the original strain, but has a better type of ear. There is still some variation in color and shape of kernel, but this does not injure it in any way when it comes to producing

for several years and have the most favorable reports from it. In fact, we are now having much of our stock-seed of Disco Pride grown there and can furnish our Montana customers with seed of this variety grown from Montana bred and grown stock-seed. The name "Disco Pride" implies the probable origin of this corn as an acclimatized strain of Pride of the North.

PRIDE OF THE NORTH

We have excellent stock of this variety suitable for territory to the east and south of Mitchell for an extremely early variety.

Our stock is excellent and of high test.

Northwestern Dent

Earliest of all Dent Corn

This corn is well known in the Northwest. It is the result of a cross between an early yellow dent and a red flint, producing a type suitable for northern North Dakota, Minnesota and Montana. In fact it has ripened in Canada where even early sweet corn is an uncertainty.

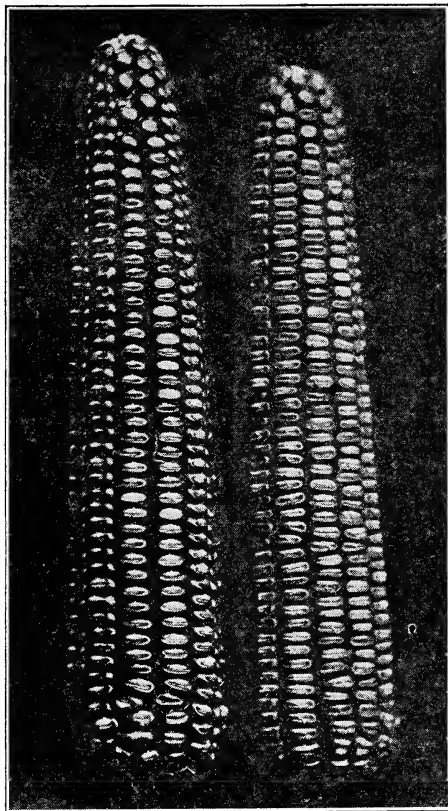
In North Dakota this corn is grown perhaps more largely than any other one variety. It is extremely early and hardy in North Dakota and northern South Dakota. No other variety seems to have given the uniformly satisfactory returns in North Dakota in comparison with Northwestern Dent.

It is extremely early and readily adapts itself to various soil and climatic conditions. While on record as having matured a crop in less than 80 days, it is safe to count on the Northwestern Dent as maturing in 85 to 90 days and when conditions are very favorable, even earlier.

The size of the ears is remarkable all things considered. In length they will average 8 inches with usually 14 rows of corn. The cut on this page is very typical of the type showing a very well proportioned ear for such an early corn. It is a smaller type, produced for northern conditions absolutely. Our stock is big this year and of high test.

The stalk is smaller and shorter than some of the later varieties, attaining the height of 7 feet on an average. The ears will be formed well up on the stalk. In yield, Northwestern Dent is a sure cropper and a worth while variety, both for the extreme Northwest and for the corn belt.

For the corn belt, our early varieties fill a very useful place in the early feed list. A few acres of Northwestern Dent planted along with the main season crop will produce an abundance of early feed, fully two to three weeks in advance of the later varieties. For early hog feed and especially for hogging-off, with rape sown between the rows at the last cultivation, Northwestern Dent is a very popular variety.



Northwestern Dent.

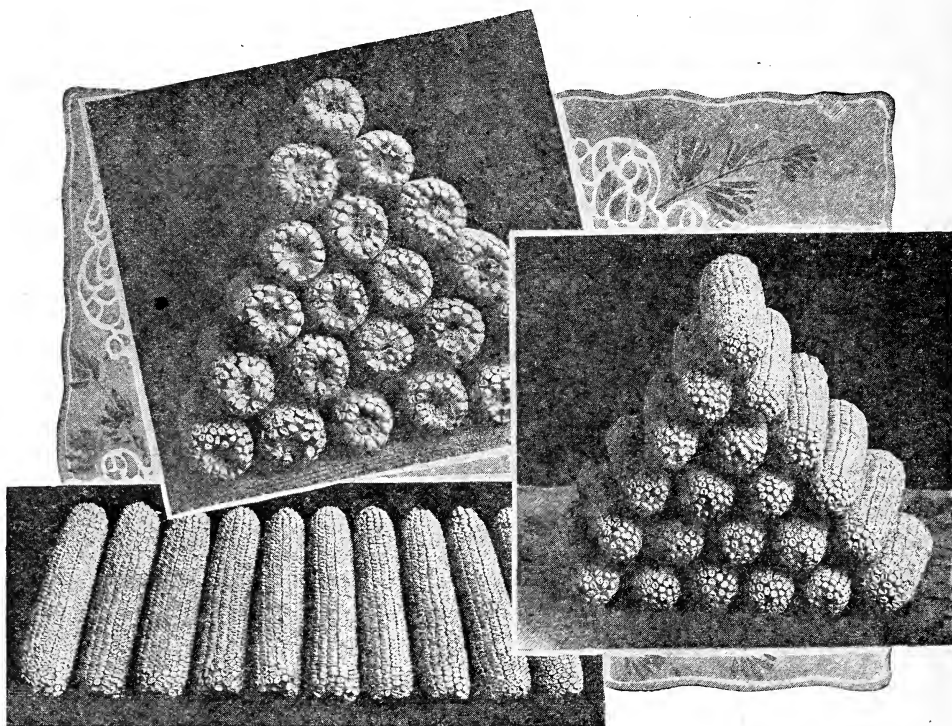
Many of our customers drill in their corn for ensilage and fodder early in June or the last of May. We ship quantities of Northwestern Dent to be used in one planter box with a late ensilage variety in the other. In cutting up the crop at silo filling time, the ripe ears from the early variety combine to make up a balanced ensilage with the more succulent late fodder type making a great feed for the feed lot and dairy herd.

Under unfavorable spring conditions, when replanting is necessary, Northwestern Dent will deliver the goods. Under ordinary conditions this corn will ripen before the hot drying conditions of mid-summer prevail. It is in truth a drought resisting variety.

See Price List Page 23.

Disco Disco 90-Day White *Disco* Silver King

A good running mate for Minnesota 13, fully equal in quality, yield and fully as early and safe to mature. Preferred by many for thin, high land. You can't go wrong on Disco 90-Day White.



Disco 90-Day White Dent

Many of the corn growers of the Northwest are partial to a white corn. Some think the white corn is hardier and a better yielder than yellow, and especially under adverse conditions both of soil and climate.

Under fair competition this variety has won sweepstakes and first place from the Northern and Central zones in many corn shows. We are proud of Disco 90-Day White on Riverview Ranch. It delivers the goods, is a sure cropper, given half a chance, and not only produces early ears of sound corn but has a large leafy growth suitable for fodder and attains a height of from $7\frac{1}{2}$ to $8\frac{1}{2}$ feet.

Besides being early, the ears are good size and the kernels deep and well shaped. The photographs above are of this corn. Notice the shape of the ear, the well filled butts and tips and the good type of kernel. We especially recommend Disco 90-Day White for northern Iowa and Illinois, central South Dakota, Minnesota, Wisconsin and Michigan. Will undoubtedly mature north of this line with care the first season in saving the seed until it is acclimated to a more northern season. Our stock is large and of a high test.



Minnesota No. 13 Corn



Minnesota No. 13 Corn

This corn needs no recommendation from us. Anyone who has been at all in touch with corn growing in Minnesota and the Dakotas knows about Minnesota No. 13 and its record. Introduced by the Minnesota Experiment Station in 1896, it has been distributed across the United States and well known wherever an early worth while yellow variety is desired. It is conceded to be the best early yellow type, ears larger in size than Pride of the North as produced in the Corn Belt and fully as early.

The northern boundary of the Corn Belt has been extended by this one variety more than by any other. The eastern states also look upon Minnesota 13 with favor. Flint corn, a common type in New England, has given way to this yellow dent corn.

In yield, records have been attained as high as 90 bushels on clover sod. In Minnesota and the Dakotas the average is close to 50 bushels which is very conservative.

The ears contain 16 to 18 rows of rich yellow grains, have a good shelling percentage, well filled butt and tip and a small shank in favor with the husker.

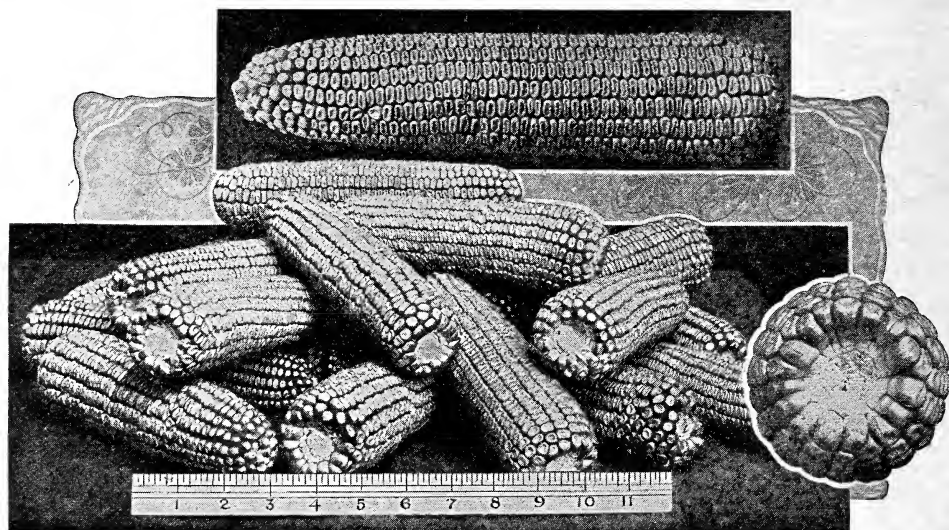
In our strain of Minnesota No. 13 we aim to retain the earliness of the true variety by obtaining the seed for our own planting either directly from the Minnesota Experiment Station or from one of their accredited growers each year. We thus preserve the type of the experiment station strain as nearly as possible, which would not be the case if we continued to raise this variety in the vicinity of Mitchell or south of here from the same stock year after year.

One field near Mitchell produced good ripe corn in 87 days from the time it was planted. It is safe to depend upon Minnesota No. 13 in 90 days any year. We have a large supply of high test.



Disco Disco-Murdock Corn *Disco*

Exceptionally Good 100-Day Variety for Northwest



Disco-Murdock

A variety very similar to our Riverview Special in color, size of ear and general make-up. The ears are well formed, shell off a large percentage of corn, the kernel is deep and with a large germ. We recommend Early Murdock for all parts of northern Iowa, central and southern Minnesota, southern and central South Dakota, northern Illinois, southern Wisconsin and Michigan.

Our stock of Early Murdock for this season is big and showing a high test. We recommend a trial to those who are not as yet familiar with this variety. We have many letters on file commending it. Some claim it will mature in any season along with Minnesota No. 13. In our locality, however, we consider there is at least a week's difference between the two. You will find Early-Murdock will make good within its territory.

Wimple's Yellow Dent

Another prize winner and a variety recognized as standard in the north half of the Corn Belt. Has been growing for a number of years in southeastern South Dakota close to the boundaries of Iowa and Minnesota. Won the northern zone sweep-stakes at the National Corn Exposition in 1907 against all comers from the northern states.

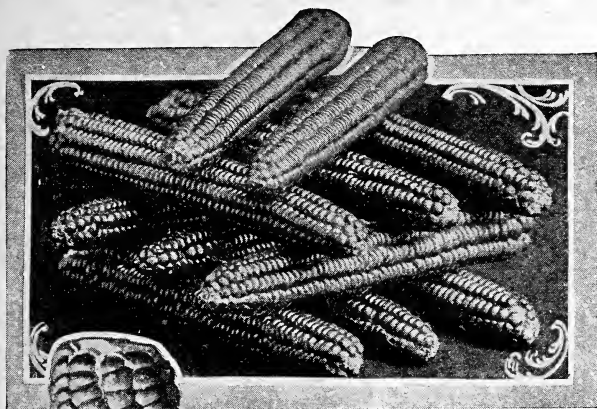
The size of the ear is surprising, an average ear measuring 9 to 9½ inches in length, 6½ to 7 inches in girth and containing 16 to 18 rows weighing 9 to 12 ounces. Its season is suitable to southern Minnesota, southeastern South Dakota, most of Iowa, northern half of Illinois, southern half of Wisconsin and other localities having similar seasons.

See Price List Page 23.

Disco

Disco Flint Corn

Disco



There is always a large demand for flint corn in all the Northern states and Canada. The various types of flint corn vary somewhat in earliness and yield, but all of them seem to possess the ability to mature a good crop of corn under adverse conditions. In the Northwest flint corn is largely used as a crop for "new breaking." It is also much used for late planting, where early crops fail to grow or for any reason the crop cannot be planted until late in the season. In this latitude it can usually be depended upon to produce good corn if planted as late as the 4th

of July. Flint corn is a very good type of corn to plant where the crop is to be fed in the field. It may be planted either alone or with other forage crops for this purpose.

DISCO-AMBER FLINT. (90 days)—A variety that has been bred to overcome the undesirable traits of some of the other varieties of flint corn. It is a good yielder, producing from thirty-five to forty-five bushels per acre under ordinary conditions. It has a fair sized ear and carries it well up on the stalk, while most other flint sorts produce the ear on the extreme lower part of the stalk, thus making it a back-breaking job to husk the corn. The stalks are of good height, leafy, and ordinarily produce two good ears to each stalk.

In breeding for the above desirable qualities, earliness has not been lost sight of. In fact, this variety is even earlier than most other flint varieties and about the same season as the very early strains of Minnesota No. 13.

The typical color of this variety is amber, but some of the ears are almost red at the tip, like the old Smut Nose Flint, so well known in the North.

GEHU FLINT. The earliest variety of flint corn and the earliest variety of any kind of corn. Adapted to the most northern localities. Ears small and low-down; color of kernel light yellow. The seed we are offering is grown from strictly northern grown "stock seed" from the extreme north. The quality and germination are very good. If you have short seasons and can't grow other later varieties try the Gehu Flint. It will mature if any corn will.

Disco.
Amber Flint Corn

DISCO-SQUAW CORN (85 days)—A very early "Native" variety, having kernels all colors of the rainbow. A very beautiful corn and one that is very popular for late planting. We have only a limited stock that we offer while it lasts at same price as Gehu.



Price List of Seed Corn



For 1917

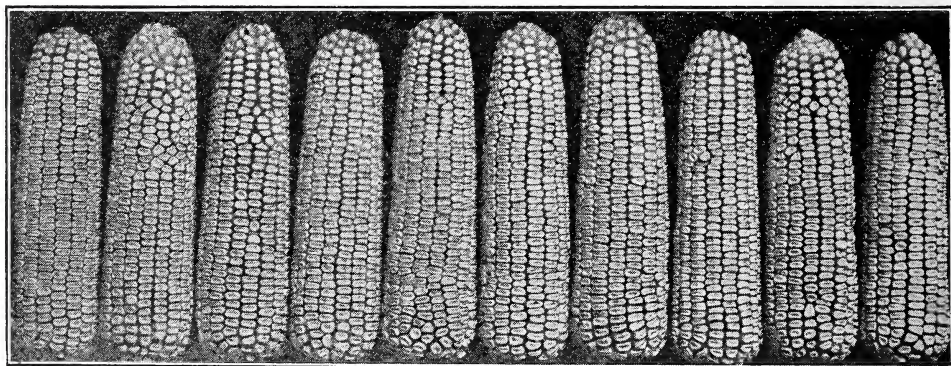
We want to furnish you good seed corn at reasonable prices. The prices given apply to lots up to 20 bushels. If you are in the market for larger lots we will be glad to make you special quotations. We have a big supply of the very best seed and with some varieties will be in position to make favorable prices to large buyers, county organizations and granges.

In making the farming business pay, we believe a man can increase his yield 5 to 10 bushels to the acre of sound corn by getting seed corn better than what he has and that such corn is worth from \$3.00 to \$5.00 per bushel. If you find the corn suitable to your soil and locality, the price per acre for seed is a matter of cents, the difference in yield a matter of dollars.

Our prices are based on carefully selected, shelled and graded seed corn.

The corn is ready for your planter box, shelled, graded and sacked, bags free. The waste is eliminated, the freight will be much less. A bushel of our shelled and graded seed corn will plant seven acres. The quality of the corn is excellent.

We guarantee safe arrival of seed corn to you and will make good any loss in case the shipment arrives short or damaged, upon receipt of necessary proof from yourself or your freight agent. Read our guarantee on page 2 which covers seed corn and any variety of seed we handle. We carefully test our seed corn both before and after sorting, shelling and grading and only ship corn of high germination. We urge customers to test their corn immediately on receipt. Read our guarantee on seed corn page 2.



Disco 90-Day White.



	Pk.	½ Bu.	Bu.	5 Bu.	10 Bu.
Disco Pride	\$1.00	\$1.85	\$3.50	\$3.35	\$3.25
Northwestern Dent	1.00	1.85	3.50	3.35	3.25
Minnesota No. 13	1.00	1.85	3.50	3.35	3.25
Disco 90-Day White (Silver King)	1.15	1.90	3.75	3.60	3.50
Disco Flint (any variety)	1.00	1.85	3.50	3.35	3.25
Disco Squaw	1.00	1.85	3.50	3.35	3.25
Riverview Special	1.00	1.65	3.00	2.90	2.80
Fulton Yellow Dent	1.00	1.65	3.00	2.90	2.80
Early Murdock	1.10	2.00	3.75	3.60	3.50
Wimble's Yellow Dent	1.00	1.75	3.25	3.10	3.00
Brown County Yellow Dent	1.00	1.85	3.50	3.35	3.25
Early Dent Fodder Corn			2.00	1.75	1.75
Medium Fodder Corn			2.00	1.75	1.75

ABOVE PRICES ARE FOR SHELLED AND GRADED ONLY.

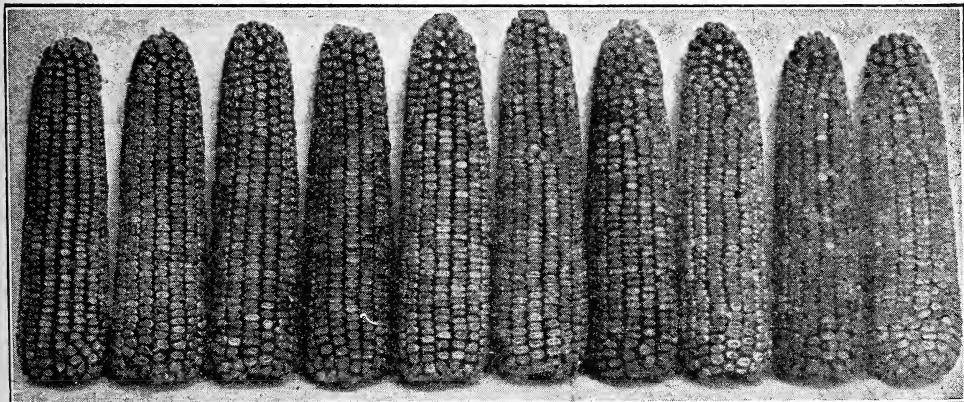
This is for extra-selected seed, shelled and graded, tested before shipping with test tag attached to every sack. This price includes bags and is f. o. b. Mitchell.

For the benefit of those who wish to have sample ears before making their selection, we will send single ears of any variety for 25 cents postpaid, or pound lots of shelled seed 20 cents. Upon the receipt of an order in return, the price for samples will be allowed or refunded. This is fair enough, isn't it?

Letter samples of any variety will be gladly sent and as we are familiar with the time of maturity, soil requirements and adaptation of our varieties to your

needs, we offer you our services free for the asking.

At the time we go to press, our corn tests are averaging 96%. But it will not be necessary to take our word for this. Those who know us remit by check, draft or money-order with the satisfaction of knowing we make good our claims. To those who are in doubt as to our reliability we urge you to deposit the purchase price with your banker and direct him to order the corn with the understanding that we are to receive the money, or the corn back as soon as you have had time to make tests.



Disco Pride.



Corn For Fodder and Ensilage

Cattle feeding and dairying is making wonderful progress in the Northwest, increasing land values and bank accounts. There are seasons, however, when pastures are parched from drought making



it necessary to depend upon forage crops. To insure a uniform amount of feed, silos have been constructed, scores of them in almost every county. The fodder or ensilage crop is found now as a matter of necessity.

By devoting an acreage to fodder corn, a large amount of winter feed is produced, or a soiling crop to be used during August and early September while the pastures are dry. It also supplies a cultivated crop that can be used in systems of crop rotation in place of the summer fallow.

We advise the use of from 12 to 15 pounds per acre drilled in rows three feet six inches apart. More corn may be used in this manner if desired or it can be sown broadcast three pecks or even four pecks to the acre and cut with a mower. But we find 12 to 15 pounds drilled in with the corn planter is plenty. For succulent ensilage to be fed to a dairy herd, the seed should be drilled in thickly, at least 15 pounds per acre, resulting in more leafy growth and less grain. In fattening cattle for market, more grain is demanded and twelve pounds per acre will suffice. We will be glad to sell you more per acre if you wish.

For fodder and ensilage corn we use our regular varieties of seed corn. In handling and cleaning these, it often happens that some portions of our seed stock have to be kept out because of some accidental mixture with other varieties. This is often merely a trace but because of this mixture we do not offer them as our regular stocks. They represent the same field stocks as our regular grades and for fodder and ensilage are equally good. We offer them at prices much lower than our regular grades of seed corn. Will gladly sell on sample, you to be the judge.

DISCO EARLY FODDER—Stocks of same season as Minnesota 13 and Disco 90-Day White.

DISCO MEDIUM FODDER—Stocks of the same season as Wimple's, Murdock and Riverview.

Fodder corn prices on page 23.

FODDER CANE. Without a doubt a very heavy producer of high class forage. Stands drought well and other unfavorable conditions. Becoming more popular in Northwest as a feed crop. We advise thick seeding for the best quality of forage. Price of fodder cane on inside back cover.



Dry Weather Crops

SUDAN GRASS. Probably no crop has come into prominence as rapidly as has this new sorghum and it is without a doubt becoming a staple crop in all parts of the country. It readily adapts itself to any soil or climatic condition. Coming as it did from Northern Africa where the annual rainfall is very scant and the soil of a very sandy nature, it is "in clover" in this country, so to speak, yielding from 1 to 3 tons per acre.

For an annual hay crop it is a wonder. From three to five pounds of seed will plant an acre, using the corn planter with cane plates, or special plates can be obtained from the planter manufacturer. Two cultivations is all that is required, as the heavy leafy growth will by that time have over-shadowed the row. It can be harvested with a corn binder, shocked up or cut with a corn knife by hand, or with a mower and handled like cane. A farm tenant, moving onto his place in March with no prospects for tame hay can plant or sow Sudan the latter part of May, or as soon as the ground warms up and the weather safe, and obtain his first cutting of hay in July, in the latitude of Mitchell. Given a favorable spring, two cuttings may be procured in a season before frost, or a seed crop of more or less value, not as a feed but as a cash crop.

Sudan seed is very scarce and high in price this season. We are fortunate in having secured the most of our supply from Colorado and ready to furnish an affidavit in upholding this statement. You will find the Colorado stock an early strain and hardy.

KOWLIANG. This is a companion crop with Sudan and may be used for fodder like any other sorghum, the grain may also be fed to all classes of live stock and is especially desirable as a poultry feed. It is particularly adapted for the Northwest and has given wonderful results in South Dakota, at the Experiment

Station, as well as other localities where it has been tried.

Its cultural directions are very similar to those of Sudan or any other sorghum crop. It has produced excellent crops, even where the earliest and most drought resistant varieties of corn have failed. It is to the Northwest what feterita and Kafir is to Kansas and Oklahoma.

DAKOTA EARLY AMBER CANE.

The Earliest of All Cane. Minnesota Amber Cane has been recognized for a number of years as an extremely early strain of the Black Amber or the Early Amber Cane. In this new strain which is called the "Dakota" Amber Cane and which is selected from S. D. No. 341, we have the earliest strain of this crop that has yet been introduced. It is earlier than Minnesota 13 corn and will mature seed wherever this variety of corn will mature. It is more dwarf than the ordinary type of Black Amber, averaging about 5 or 6 feet. It is a very leafy desirable type for the North.



Dakota Early Amber Cane.

See Price List on Inside Back Cover.



Millet

DAKOTA SELECTED KURSK—Our Kursk Millet has made good. We put this out to the farmers of the Northwest in 1908 for the first time. As both a hay and seed producer it ranks very high, as shown by results secured the past eight seasons. This variety has

been grown at both the South Dakota experiment stations every year since it was introduced in 1898 from Kursk, Russia. It has given excellent results during the whole time, and in dry years the weight and quality of the hay have been far ahead of the common German or Hungarian Millet. In favorable seasons the difference has not been so marked, but is always in favor of the Kursk.



Millet. Head of Broom-corn Millet and Field Showing Rows of Kursk Millet Grown for Selection at the Government Experiment Station, Newell, S. D.

Our stock is grown from selections that were made at Brookings by Mr. Wheeler in 1904.

SIBERIAN MILLET—This is the same type of millet as the Kursk. In fact, the Kursk Millet is a special importation of this millet from Russia. Our Dakota Selected Kursk is a pedigreed Kursk stock. What has been said of the adaptability of Kursk Millet to the Northwest applies to a large extent to the regular Siberian Millet.

GERMAN MILLET—This millet occasionally makes a taller, ranker growth and produces a greater weight of hay per acre than the Kursk, under favorable conditions. Our stock is clean and of excellent quality, and unless otherwise specified, is Dakota grown.

JAPANESE MILLET—This millet is a rank grower and produces an abundance of fair quality hay.

PROSO OR BROOM-CORN MILLETS—There are several varieties of this type of millet differing in color of seed as well as in other ways. The most common varieties have red or white seeds but the Black Voronezh has dark brown seeds. The Proso Millets are commonly grown for their seed instead of for hay and they are particularly adapted to the dryer sections of the Northwest. We can usually offer the white seeded variety commonly grown and also the red-seeded which usually is called Early Fortune.



Disco Quality Grass and Clover Seed



DON'T BUY SEEDS WITH YOUR EYES SHUT

It is an undeniable fact that there are still many farmers who persist in buying their grass and clover seed with their eyes shut and from any old place. Don't do it. Buy on sample and see that the seed comes up to the sample. Send a sample to your nearest Experiment Station, or have your county agent look it over. Our word is good and we will tell you the honest truth regarding what we have and invite you to have the seed tested as to purity and germination and abide by your decision.

SOW DISCO BRAND

Our DISCO BRAND represents seeds of highest quality and the best seeds obtainable anywhere at any price. In order to secure and sell the Disco Brand it is necessary for us to handle other grades not quite up to the Disco standard. Rather than blend this grade in with the best grade, we discriminate between the two and offer our Emerald Brand.

The EMERALD BRAND is a very good grade, well worth the price and equal to

the best grade often sold. The difference between the real value of this and our Disco Brand is often only one of appearance.

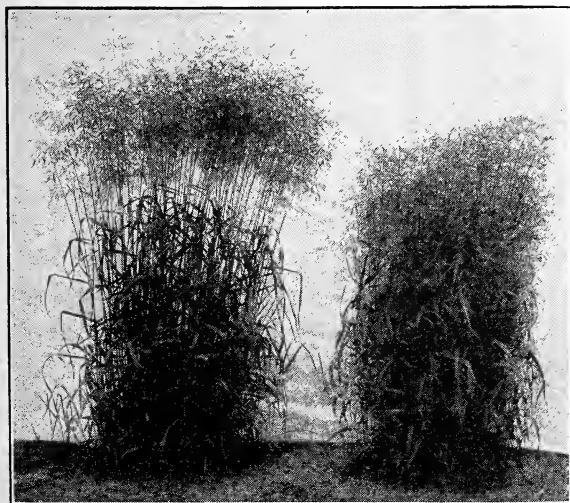
DISCO GRASS SEEDS

Timothy. The leading grass for pasture and meadow. There is a quantity of splendid seed raised in this vicinity. We furnish a very fancy grade thru our cleaners of hardy Dakota grown stock and will be glad to send samples, also purity and germination tests. We advise 10 to 12 pounds per acre.

Timothy and Alsike. There is a great deal of timothy and alsike clover sown together for hay crop and pasture. Sown at the rate of 15 pounds per acre in spring, excellent pasture is usually obtained by late fall same year, and the hay crop begins the following year. An excellent mixture for low wet places and alkali spots. One of the best mixtures for reclaiming waste places. Ours is a natural mixture composed of about two thirds timothy, the balance alsike. Both varieties are perennials and consequently reseeding will not be necessary for several years. We advise 12 to 15 pounds per acre.

Timothy-Red Clover Mixture. This is a natural mixture, bought on a timothy basis, just about right for sowing. The two varieties make an excellent combination, cure better and with less liability to lodge. The usual amount sown is 15 pounds.

Russian Brome Grass. A drought resisting perennial, desirable for permanent pasture. One of the best hay and pasture grasses for dry regions in the North—early to start in the spring and remains green until fall. Hay of excellent quality. In seeding, 20 pounds per acre are sufficient.



Russian Brome Grass (*Bromus inermis*),
Showing Two Types of Plants

Price List Inside Back Cover.



Disco Quality Grass and Clover Seed—Continued

Slender Wheat Grass. An especially desirable pasture grass where there is alkali to contend with. Combines well with Bromus grass for pasture and hay crop using about 7 to 8 pounds of each, or alone from 15 to 20 pounds. Sometimes known as Western Rye Grass.

Kentucky Blue Grass. A bushel of average Kentucky Blue Grass weighs 14 pounds. The seed we have in stock and use in our various mixtures will weigh from 21 to 25 pounds. The best is by far the cheapest. Disco Brand equals the best. This is the basis of our lawn grass as well as pasture mixtures, affording a solid turf and is very hardy.

Disco Lawn Grass. A desirable lawn should appear at its best from early spring to late fall. By mixing early, medium and late grasses, our Disco Lawn Grass mixture insures the desired velvety even appearance. The mixture contains a well proportioned amount of White Dutch Clover and Kentucky Blue Grass as the basis, with Perennial Rye Grass and Canadian Blue Grass added for quick results. For seeding in late spring, a small amount of red clover will be of benefit as a nurse crop and present a desirable appearance as well. One pound of lawn grass will cover 200 square feet of lawn surface.

DISCO CLOVER SEEDS

Medium Red Clover. This is the common kind of red clover. Used alone or with timothy or in other grass mixtures. Our stock is absolutely northern grown, hardy and early. 10 pounds per acre.

Mammoth Red Clover. Ten days or two weeks later than Medium Red and not so commonly grown. We cannot always furnish South Dakota grown seed of this clover, but will offer the best seed obtainable at prices governed by the con-

dition of the market. 12 pounds per acre.

Alsike or Swedish Clover. The best clover to be used with timothy, and best for low moist places. In height will range between the small white clover and medium red. A perennial and very hardy. 8 to 10 pounds per acre.

White or Dutch Clover. Will do well most anywhere. Especially desirable in a lawn grass and pasture mixture. Is usually sown with Kentucky Blue Grass. Seed is high priced but a small amount will go far. 6 to 8 pounds per acre.

Price List Inside Back Cover.

PERMANENT PASTURE and MEADOW MIXTURES

The time is bound to come when more thought must be given the pastures of the Northwest. The native grasses must eventually give way to such mixtures that will produce a more continuous growth during the growing season, and much more feed.

In blending the desirable grasses and clovers suitable for a permanent pasture and meadow, the Disco standard is adhered to. We use timothy, alsike clover, medium and mammoth red clover, white clover, red top, Kentucky blue grass, Canadian blue grass, English blue grass, Italian rye grass, Slender wheat grass, Bromus and small amounts of alfalfa and sweet clover. Will make up a mixture to suit the soil requirements as needed. For the low places we add more alsike, timothy, white clover and red top. For the high places lacking in fertility, we add more sweet clover, Canadian blue grass, mammoth red clover and rye grass and bromus.

Price List Inside Back Cover.



Disco Small Grain



This is an unusual year with small grain. Prices are high, seed scarce and of fair quality. Conditions are favorable for a continuation of high prices, especially for small grain of good quality. We are fortunate in the quality of seed produced on Riverview Ranch, the home of much of the small grain we list, and advise early orders.

BARLEY

A most certain crop regardless of the season. Is very drought resistant, yielding splendid returns in dry farming areas. Seldom lodges even in rich moist places owing to a stiff straw, which is also rust resistant. Yields vary but are usually well worth while. Barley makes a splendid nurse crop for clover or alfalfa. Two bushels per acre are advised.

Mansury. Is six-rowed. A well established variety, probably better known than any other listed. Our stock is of fine color and well filled.

WHEAT

Marquis Wheat. A heavy yielding beardless variety, absolutely without a peer. It is an early spring wheat, very hardy, based upon the ability to withstand very dry weather at growing season as well as severe weather at planting time. Among other varieties tried out at Riverview Ranch the Marquis has always been first in yield and ready for harvest at least one week ahead of any other. In changing your seed this season, consider the Marquis with increased yield and earliness in its favor. Our seed of this is thoroughly acclimated.

OATS

We are listing but two varieties this season, the **Sixty-Day** and **Swedish Select**. The color could not be better, they will weigh out well, are plump and clean. Will gladly submit samples. We raise these on Riverview Ranch and find these two varieties especially dependable.

Swedish Select. This variety has become well known throughout the country, and especially in South Dakota, Minnesota and Wisconsin, also Montana. The experiment stations of Wisconsin and South Dakota have probably accomplished more in first introducing this variety. Today it is standard and found to be wonderfully drought resistant. In the region between the James and Missouri rivers, a dry period often comes in the early part of the growing season. At this time many varieties of oats are seriously injured by drought. The **Swedish Select**, however, has shown itself capable of resisting dry weather at this season of the year and in fact has produced some of its largest yields in such seasons.

Sixty-Day. A very early yellow variety much resembling the **Kherston** in every particular but much hardier and ripens about same time as barley. Was imported from Siberia several years ago making a splendid addition to the small grain varieties. We can recommend the **Sixty-Day** as being a good yielder, stand up with stiff straw and not subject to rust.



SIXTY-DAY OR KHERSTON OATS.
Top, 100 Grains of Oats; Bottom, 100 Kernels
With Hulls Removed.

Price List Inside Back Cover.



Rape

Rape can be put to quite a number of uses. It may be sown alone as a spring crop to provide early pasture. It may be sown with spring grain to provide fall pasture after the grain is cut. In this latter case it is better sown after the grain is up and the ground dragged immediately after sowing to cover the seed. As it is a common practice to drag or weed our grain crops after they are up, the sowing of rape at this time can be easily done. Rape may also be sown just before the last cultivation of corn to provide fall feed and increase the yield of feed per acre of ground, or rape may be sown with fall rye to provide fall pasture.

The uses of rape are hardly limited to those mentioned above, as it may be sown at almost any time of the year and will provide quickly a large amount of forage. The farmers of the Northwest have not yet come to realize the possibilities of rape. There



Rape Sown in Corn at Last Cultivation.

Rape Sown with Small Grain for Fall Pasture.

are thousands of acres of land sown to small grains that could be made to yield an abundant fall pasture by the sowing of two pounds of rape seed to every acre of ground. The cost of the seed is so little and so small an amount is required that there is really no expense connected with it compared to the value of feed that is secured. The amount of seed that is sown per acre varies from two to six pounds, depending upon the way it is handled. When sown alone, from five to six pounds are recommended. When sown with small grain, two to three pounds.

Emmer or Speltz

This crop is becoming more popular every year. Very few farmers in the Northwestern Great Plains region can afford to be without it. It produces a good yield under adverse circumstances, where other crops would fail. It will stand more dry weather than any other grain crops, with the possible exception of Durum Wheat. It produces more food value per acre than most of our other grains and is a valuable feed for all kinds of stock. The plant is almost entirely free from rust, smut and other grain diseases.

We wish to do everything we can to encourage the growing of Emmer in the Northwest. Farmers in the semi-arid portions of the Great Plains region who depend on such crops as Swedish Select and Sixty-Day oats, Marquis Wheat, Brome-grass and Alfalfa need have no more fear of crop failures than those in the regions of more abundant rainfall. Emmer should occupy a place in every dry farming rotation.

Prices of all Seeds are given on Inside Back Cover.

We will consider it a Special Favor if you write below the Names of some of your Friends who are likely to use Field Seeds

NAMES	POSTOFFICE	STATE

PLEASE READ BEFORE ORDERING

When orders are received from this Catalog the Dakota Improved Seed Company assumes that the customer has read this page before placing his order.

Write plainly your name, postoffice, county and state on each and every order sent us. If shipment is to be by freight, be sure to state whether the railway station is the same as your postoffice or not.

Order early. A great many delays and other troubles can be avoided by ordering early and we will consider it an accommodation if you will do this.

Cash should accompany order, and should be in the form of money order, bank draft or as currency in a registered letter.

Delays in shipment. If we cannot send your order the same day that it is received we will mail you a card stating that we have received your order and we state the amount of money inclosed and the number of the order. If this notice

or the seeds themselves do not reach you in reasonable season write to us without delay, so that we can look the matter up. If your order can be filled within a few days this is all the notice we give. If for some reason shipment on a part or all of your order is unavoidably delayed, we will give you notice. It sometimes happens that we are out of stock or our stock may not be cleaned ready for shipment, or there may be other reasons. Write to us if your order does not arrive in due season.

Prices in this book are subject to change without notice. The prices quoted are based on the conditions prevailing at the time this book goes to press. If you desire to place an order for items on which the prices are likely to fluctuate or for large amounts of any seeds, it is better to write for firm prices before ordering, same to be good for immediate acceptance. Prompt attention will be given requests for quotations.

**Do YOU
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THE DAKOTA FARMER

ESTABLISHED 1881

Published Twice a Month by THE BUSHNELL CO., Aberdeen, S. D.

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If you are farming, or interested in farming you do. Why? Because this is a time of wonderful progress in farming, and you must have some means of keeping up with the strides your neighbors are taking toward increasing their production per acre.

The farm paper, if it is a good one, gives you this means, placing before you not only the actual experiences of other farmers, but also the results of study and experiments by men who spend their lives in developing better farming methods.

The Dakota Farmer is a good farm paper. We believe it should be in the hands of every farmer and stockman in "The Dakota Farmer Empire," and have made a **special arrangement** with the publishers whereby our customers can order their subscription thru us.

Fill out the coupon on other side and send it, together with \$1.00 to

**The Dakota Improved Seed Co.,
Mitchell, S. D.**

Note—Be sure to send the coupon to us; not to the publishers.



Price List

January 1st, 1917.



The prices given below are those in effect on the above date or as near as we can anticipate them for the season. **All prices are subject to change.** We invite correspondence on seeds where prices are likely to vary or on any seeds when large quantities are desired.

All prices are f. o. b. Mitchell, S. D., freight or express to be paid by customer. If delivered prices are requested, please make use of the special estimate sheet on page 1. In ordering by parcel post your postmaster will tell you in what zone from Mitchell you are in so that your remittance will include the postage.

Our prices include bags weighed in. No charge for bags.

Commercial Alfalfa

	Per pound.
Dakota Grown.	
Disco Brand	\$0.22
Emerald Brand .....	.20

All alfalfa seed offered is grown in Dakota, unless otherwise specified. Grades of Commercial Dakota grown alfalfa seed not equal to above will be sold on sample. We usually have small lots at attractive prices to those who wish to sow alfalfa at the lowest possible cost, or wish to sow alfalfa seed with small grain as a fertilizer crop.

Disco Registered Alfalfa

	Per pound.
Disco 26	\$0.25
Disco 28 .....	.28
Disco 38 .....	.28
Disco 79 .....	.27
Disco 80 .....	.25

The Registered alfalfas available at the time we go to press are listed and partially described on page 6. All represent hardy types from fields of long standing.

Disco Pedigreed Alfalfa

	Lots up to 60 lbs.	Over 60 lbs.
Disco Grimm (as described on page 8)	\$0.60	\$0.50
Disco Baltic (as described on page 9) .....	.60	.50
Disco 19A (a special selec- tion of Grimm) .....	.75	.60
Disco 32C (a special selec- tion of Baltic) .....	.75	

On pages 7 and 8 we describe our Disco Pedigreed alfalfa composed of Baltic and Grimm selections all absolutely hardy.

Disco Clover Seed

	Per pound.
Medium Red—	
Disco Brand	\$0.21
Emerald Brand .....	.19
Mammoth Red .....	.21½
Alsike .....	.22
White or Dutch .....	.50
Sweet Clover, white blossom, hulled	.19
Sweet Clover, white blossom, un- hulled .....	.12
Sweet Clover, yellow blossom hulled .....	.17
Scarifying seed add one cent per pound.	

Disco Grass Seeds

	Per lb.	Per 100 lbs.
Timothy		\$7.00
Timothy, Alsike mixed	\$0.10	10.00
Timothy, Red Clover mixed.	.11	10.50
Permanent Pasture Mixture	.15	15.00
Permanent Meadow Mixture	.15	15.00
Evergreen Lawn Grass.....	.25	22.50
Kentucky Blue Grass .....	.20	19.00
English Blue Grass.....	.16	15.50
Slender Wheat Grass.....	.20	18.00
Bromus Inermis .....	.15	14.00

Disco Seed Corn

Descriptions and prices of Seed Corn are given on pages 14 to 24. Complete price list on page 23. Letter samples gladly mailed, special estimates given.

Disco Sorghums

	Per lb.	Per 100 lbs.
Sudan	\$0.50	\$48.50
Dakota Early Amber .....	.10	7.00
Fodder Amber Cane .....	.08	5.00
Feterita .....	.08	7.00
Kowliang .....	.10	7.00

Disco Millets

	Bushel.	Per 100 lbs.
Dakota Kursk, 50 lbs. per bu.	\$2.00	\$3.85
Siberian, 50 lbs. per bu.....	2.00	3.85
German, 50 lbs. per bu.....	2.00	3.85
Japanese 36 lbs. per bu.....	1.80	4.75
Early Fortune, 50 lbs. per bu.	2.00	3.90

Miscellaneous

	Per bushel	
Marquis Wheat		\$2.50
Swedish Select Oats.....	"	.90
Sixty-Day Kherson Oats..	"	.90
Barley	"	1.90
Speltz	"	1.25
Buckwheat	"	2.00
Rape	Per 100 lbs.	10.00
Flax—Ask for prices about April 1st.		

Prices subject to change. Bags weighed in.

Dakota Improved Seed Co., Mitchell, S. D.

DISCO HARDY ALFALFA NORTHERN BRED SEED CORN



DAKOTA IMPROVED SEED CO.
MITCHELL SOUTH DAKOTA